D—1963

B

PWD 3 ML

HO

App. F IX—4

Previous Reference

File No.

Serial Nos.

Later References.

PUBLIC WORKS DEPARTMENT
(MAJOR IRRIGATION)
Mysore Government Secretariat,
Vidhana Soudha, Bangalore.

THE MYSORE GOVERNMENT SECRETARIAT

Serial Nos.

19-9-62
to
10-4-63
G.D.

Part B for

SUBJECT

Report of the Krishna-Godavary Commission — Summary of recommendations — LCQ

WD 010650—GPB—40,000—6-3-62

Not to Destroy
B

Notes pages.....15.....
Correspondances pages....66.....
C/I Class.....B.....
For/Not for Section Note Book (S)...
To be destroyed after.....
By Under Secretary to Government.

13/9

K-G Commissions Report - Summary & Recommendations

1

Mysore Government Secretariat | File No. | of 196 . | [App. F: III 2

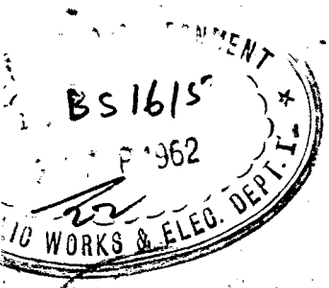
5350/c

Serial No.

1) For orders if a copy of the summary of Recommendations should be sent to Mr. Subankhan for furnishing his reactions.

19
S. G. BALEKUNDRY,
Officer on Special Duty
Public Works Department

Secy



26/9

4) A draft letter is put up for approval
26/9/62

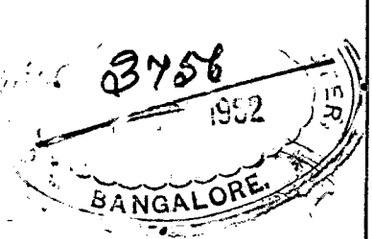
5)

6) Issued

Encls. Summary
Date 26.9.1962

C.M's orders on

7) with reference to para 8 of P.W.D. a draft letter is placed below for approval
29/9/62

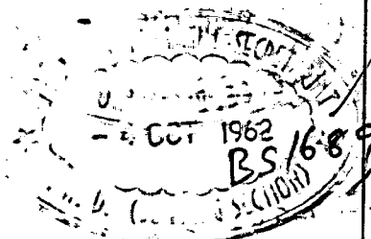


29/9/62

Secy 8) 29/9

S. G. BALEKUNDRY,
Officer on Special Duty,
Public Works Department.

P. J. FERNANDES,
Secy., P.W. & Elecy.



C.M.

9) I feel there is unfortunate delay in merely sending a letter of thanks & acknowledgement. Draft has been issued under No. WJ. 3234 dt. 1.X.62 P.W. dy) 1/10/62

19 letters dispatched.

2

File No. of 196 . 5350/B62

Mysore Government Secretariat

Serial No. 11

the delay mentioned by C.M. would have been avoided if G.S. to C.M. had taken action regarding acknowledging receipt.

4/10/62

Secy

B S1744

No need to pursue this matter. CM has not blamed us in particular.

5/10

(12)

MYSORE GOVERNMENT SECRETARIAT
No .....
10 OCT 1962
D. W. D. (BUILDING SECTION)

7/10

Main report received from Govt. of India has been distributed to Ministers for proj 2) CS 3) Secy PWDE. 4) Jt. Secy. PWDE. 5) C/E I/P. 6) C.E (C) 7) OSD. PWD. 8) S.E. I.I.C. Dharwar (vide P. 49 C/g).

Report of the Krishna Godavary Commission

Mysore Government Secretariat | File No. of 196 . | [App. F. III 2 3

Serial No. 13

D.O. Letter No.DWII-32(12)/62 dated 9-10-1962 from the Deputy Secretary to Government of India, Ministry of Irrigation and Power, New Delhi.

Notings thereon -

13) "Will this not clash with the H.E.C.P. meeting at Jog"

Id/-P.J.F. 11/10

O.S.D.

14) "It collides 100%. A draft reply is attached."

Id/-S.G.B. 12/10.

Secretary

Letter issued to Shri B.K. Uppal, Deputy Secretary, Ministry of I & P.

D.O. Letter No.Dw.II.32(12)/62, dated 25-10-1962 from the Deputy Secretary to Government of India, Ministry of Irrigation and Power, New Delhi.

Notings thereon -

15) "For orders if M.P.W.D.and the following persons ma be issued with a copy each:-
1) Chief Secretary.
2) Secretary, P.W.& E.
3) Joint Secretary, P.W.&.E.
4) O.S.D., P.W.D.
5) C.E.I.P.
6) C.E.(Gl.)
7) S.E. (I.I.C. Dharwar). "

Sd/-S.G. Balekundry 2/11.

Secretary

16) "Yes"

Id/-P.J.F. 2/11.

17) "Also please send a copy with compliments to Shri M.S. Thirmumale Iyengar."

Id/-P.J.F. 2/11.

18) 8 copies are issued to M.P.W.D. & T officers, above mentioned; ~~officers.~~ in para 15. therefore there is no copy to be spared for M.S.T. Iyengar, unless the C.M. agrees to release one of his (two) copies, received from Shree Bhagesam, in which event — may please be considered whether we could do so, since GOI have marked all these reports as "Secret" & "For official use only".

PWD 144/J.S/62. 6/11/62.

J.S. 7.11.62

Secy. 7/11

SECRETARY TO GOVERNMENT No 7 NOV 1962 PUBLIC WORKS & ELEC.

Note.—Contn. Sheet

4

File No. of 196 .

Mysore Government Secretariat

Serial No. 19

Shri M.S.Thirumale Iyengar was working as Adviser to Government, PWD for a period of two years. During that period he was intimately associated with our case for the Krishna waters and the memorandum which was prepared by us was also edited by him. I personally feel that it would be useful for us to send a copy of the report which is now received although it has been marked for official use only. To begin with even as a gesture of courtesy to an officer who was associated with this work it would be correct on our part to send the report to him. Apart from this Shri Iyengar after going through the report may like to offer his comments which would be useful to us in the coming months when we will have to deal with follow-up action on this report. C.M. may kindly approve.

C.M.)

13/11

15/11/62

- Secy (P&D)

A copy of the report is sent to Shree M.S.T. Iyengar, 20

16/11/62

Mysore Government Secretariat

[App. F. III 2

File No. PWD 345 PGA 62 of 196

Serial No.

21.1

Mr. C.L.Handa, Member, C.W.P.C. had just telephoned to me from Delhi. He said he would not be able to come to Bangalore this month for discussions regarding the K-G-Commission Report. However, the Chief Engineers and Special Officers from Maharashtra and Andhra Pradesh already had preliminary discussions with him in Delhi on this subject ~~and~~ as they had come there in some other connection. He therefore suggested that Shri Subhan Khan and Shri Balekundry may also come to Delhi for preliminary discussions.

Shri Subhan Khan and Shri Balekundry may therefore kindly make arrangements and proceed to Delhi within the next three or four days if it is convenient to them.

5/11

Jt. Secretary, PWD
(Shri Subhan Khan)

O.S.D. (Shri Balekundry)

SECRETARY TO GOVERNMENT No SS 2611 Nov 1962 PUBLIC WORKS & ELEC. DEPTT.

PWD 130/J.S/62.
5/11/62

21.3

I have been trying to get in touch with Mr. C.L. Handa to fix a date for discussions. He is not in headquarters and I am told this morning that he is expected back in Delhi tomorrow. I will talk to him as soon as he returns to headquarters, fix a date and then proceed to Delhi along with the O.S.D. Meanwhile orders may be issued for drawing advance T.A.

Secy P.W.D.(R&B) 12.11.62

21.4 13/11

SECRETARY TO GOVERNMENT No 1962 PUBLIC WORKS & ELEC. DEPTT.

MYSORE GOVT. SECRETARIAT No. 10160 13 NOV PUBLIC WORKS DEPTT. (ADMINISTRATION)

13/11/62

MYSORE GOVERNMENT SECRETARIAT No. 6339 14 NOV 1962 P.W.D. (BUILDING SECTION)

21.5 O.S.D (PWD) has not seen this. May be marked to him.

13/11/62 13/11 (O.S.D. PWD) 15/11/62

Note.—Contn. Sheet

Journeys of Sri Seshagiri and
to Delhi PWD 17 BRA 62

File No. PWD SPG 62 of 196.

Mysore Government Secretariat

Serial No.

21.6) Revised letters to Estate Officer is attached. Accordingly a revised letter to Handa also may please be sent.

J.S.

21.7) 16.11.62

O.S.D.)

21.8) Draft telegram is put up for approval

21.9) 22/11

21.10) 22.11.62

(22

In their letter of 8th October 1962, the Irrigation & Power Ministry of Government of India indicated that Messrs C.D.Handa and D.J.Jaini would come to the State Capital and discuss the reaction of State Technical Officers on the Krishna Godavari Commission Report. Accordingly when we contacted Mr.Handa on phone, he indicated that he would come here on 4th November 1962. However he did not keep up the programme. On the contrary he asked us to come to Delhi. Accordingly we planned to go to Delhi on 24th November 1962, but had to cancel the programme on account of suspension of plane services and non-availability of train accommodation. Now

Report on the Krishna - Godavary Commission. 7

Mysore Government Secretariat | File No. PWD 17 DRA 62 of 196 | [App. F. III 2

Serial No.

the Joint Secretary, P.W.D. has decided in consultation with Mr.Handa, that we should proceed to Delhi by train on 2nd instant so as to have discussions on 5th and 6th December 1962 at Delhi. We would be away from Head Quarters for nearly 8 to 9 days.

23) It will be recalled that during Ghose talks, Mr.Handa has tried to give an impression that all other States Representatives were in a mood to 'compromise' in view of the National emergency. However, subsequently I had talk with Maharashtra representative Mr.Apte on phone. He could not at all corroborate Mr.Handa's version, but indicated that Maharashtra positively objected to Srisailam and Nagarjunasagar Hydro-Electric Projects since they would not get any waters in view of heavy demands in the upper reaches. Therefore it is felt Mr.Handa is not going very straight in this matter and therefore it seems better that we might communicate our reactions in writing rather than talking and incidentally avoid this long pilgrimage to Delhi. Also it may be noted, Government have directed that tours etc. should be cut down to a minimum in view of the emergency.

24) In case it is decided that we must go to Delhi, then it may please be seen that it is not very desirable that only Secretariat Officers should attend the technical discussions without the Technical Head of the Department.

Report on The Krishna - Godavari Commission Report.

8

File No. PWD 17 DRA 62 of 196.

Mysore Government Secretariat

Serial No.

a dozen times by now but on every occasion, the Chief Engineer also attended. Therefore the Chief Engineer, Irrigation Projects may also be directed to attend these discussions at Delhi.

23/11/62

(S.G.Balekundri),
Officer on Special Duty, P.W.D.
(23-11-1962)

Joint Secretary, P.W. & E.

PWD 362 gs
23.11.62

Secretary, P.W. & E.

It may not be desirable at the present stage to put down anything down in writing as we may unnecessarily commit curselves. Whatever we have had to say in writing has already been incorporated in our memorandum and also in various formal communications which we have already sent to the Government of India. At the present stage it is likely that unless we push this matter further things may start drifting and Shri Handa may not take any action. Shri Handa has already made me to understand that he has had informal talks with Andhra Pradesh and Maharashtra representatives and he would like to have such informal talks with us. It would not be correct on our part to avoid such talks at the present stage although I agree that they may not bear much fruit. The Joint Secy. and O.S.D.'s going to Delhi will help to find out at least how Shri Handa's mind is working and whether he has any proposals of compromise or otherwise which he wants to communicate to us.

WD-010154-GPB-PZS-8,00,000-

Serial No.

After all we have to recollect that the Gulhati Commission's Report is merely a fact finding ~~report~~ report and no recommendations have been made therein regarding the allocation of river waters to the various States or regarding the sanction of projects. Secondly, our immediate objective is to obtain clearance for Malaprabha Project and the visit to Delhi may at least be instrumental in getting this through after establishing clearly that it falls within the scope of the Commission's report and does not affect the interests of any other State.

SECRETARY TO GOVERNMENT No. BS 2046 2 NOV 1962 PUBLIC WORKS & ELEC. DEPT.

2C

With regard to the other suggestion that C.E.,IP should accompany, I agree. He may be intimated accordingly. There would be also no objection to giving the Secretariat file concerning the K-G Commission for his perusal so that he gets the full background of the case.

A

24/11

MYSORE GOVERNMENT SECRETARIAT No. 26 NOV 1962 P.W.D. (BUILDING SECTION)

27

Necessary G.O. may please be issued authorising Mr. I.M. Nagdem C.E. (IP) + visit Delhi from 3rd Dec. to 7th Dec.

28

G.O. No. PWD 346 SPS 62 Dated 15-11-62, authorising J.S. & O.S.D. + visit Delhi may be cancelled & a new G.O. issued

part 344 SPHL

to include C.E. (IP) also, & indicating the new date (3rd to 7th Dec 62)

26/11/62

E. G. [illegible]

W.S. (S.)

Serial No.	
29	Draft above 27/11
30.	A draft has been put up in file no PWD 346 SPG 62. 28/11/62
31	28/11/62
32	Orders have been issued in G.O. No PWD 346. SPG 62 dt 29-11-62 Now this file may be returned to Buildings section to take action on the last sentence of para 2 of it. 30/11/62
33	30/11/62 Secretary
34	Action is being taken. As noted in file & C.E. I.P separately

MYSORE GOVERNMENT SECRETARIAT
1 DEC 1962
D. H.

Mysore Government Secretariat | File No. PWD 17 BRA 62 of 196 | [App. F. III 2

pbldy

Serial No.

L.A.Q.No.16 by Shri M.P. Eswarappa

~~35~~ The order thereon —

35) "The K.C. Commission's Report is still Secret policy re: (c) may please be indicated" Sd/- Sec'y B. 29/11

~~35~~ Sec'y 36) "It is still a confidential document and as such it will not be possible to furnish any details" Sd/- M.A.S. 29/11/62.

37) "please show me the covering letter of G.O.I. forwarding the Report. Have they specifically asked us to keep the report Secret?" Sd/- P.J.F. 30/11

~~O/D~~

38) The G.O.I. letter in question is @ P-47 C.F.

Secy

3/12/62

39) CM may kindly see the Council question put in by Shri M.P. Easwarappa regarding the Gulhati Commission Report. The Govt. of India while forwarding the copies of the Report to us in their letter of October 25, have requested that this Report may kindly be treated as secret at this stage. In view of this request it may not be possible to place a copy of the Report on the table of the House and it may also be embarrassing to

SECRETARY TO GOVERNMENT No 4 DEC 1962 PUBLIC WORKS & ELEC. DEPT.

12

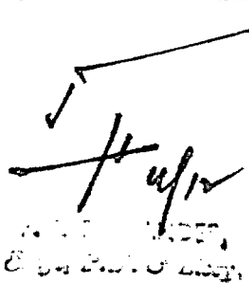
File No. PWD - 17 - BRA 62 of 196.

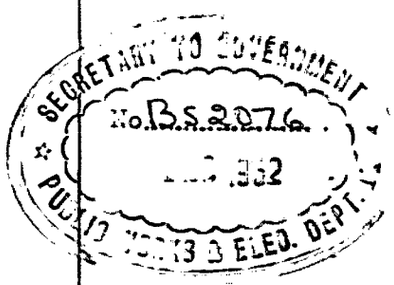
Mysore Government Secretariat

Serial No.

the answer/question put in by Shri Easwarappa.

For orders.





CM

A.O.) 6/12/62

Secy (L & J)

41) Secy, Legislature Dept may kindly see.

6/12

Secy (Legislature)

In a Legislative Assembly a member raised his question and the Chief Minister made a statement. He said a report has been received and is under examination. He also said that a copy of the report was not furnished to the Govt. In view of this, I suppose the Hon'ble question may be answered.

42

Mysore Government Secretariat

PWD File No. 17 BB 1 of 196 2 [App. F. III 2

Serial No.

TO GOVERNMENT SECRET. No Bs 110 18 JAN 1963 PUBLIC WORKS & ELEC. DEPT.

LEGISLATURE SECRETARIAT 6208/2-B 18 JAN BANGALORE.

OF 5809 18 JAN 1963 BANGALORE.

MYSORE GOVT. SECRETARIAT No. 605 JAN '63 PUBLIC WORKS (MINOR IRRIGATION)

[illegible] JAN 1963

1 (b) (a) Yes
(b) The reply is under Consideration
(c) No, as the reply is still Confidential

This shall satisfy the member and would also ensure uniform treatment of both Houses.

Yes, as is likely, the session is prorogued only written replies will be given by Govt in lieu of the oral answers unless some member stakes an identical Question again

Secy (PWD) 16.1.63

(P3) For approval to the suggestion made by Secy Legislature Dept.

18
P. J. FERNANDES,
Secy., P.W. & Elecy.

CM

21/1/63
G. NIJALINGAPPA
Chief Minister

Secy (PWD)

The reply @ issued.

30-1-63
D.S. (I)

Note —Contn. Sheet

605 (1916/63 File No. PWD 3 MLA of 1963.)

Mysore Government Secretariat

Serial No.

MD 17 BRBS2

CR 812/63

534.

47) Fair copies of this have been sent to the Legislature. The file may now be referred to the C.M. (through the Building Section)

31/1/63

48) OSD / PS to CM — 4/2/63

4/2/63

49) The date of the notice of this Question is 30-11-1962 as per admitted copy from the Legislature Secty. This date, being prior to the date of prorogation of the L.A & L.C, i.e. 18-1-1963 this Question has lapsed. However, if the member desires to renew the Question it may be taken up & the file sent up to this Office.

6/2/63

Private Secretary to the C... ter

Secy. P.W.D

OFFICE OF THE CHIEF ... No 71 5 FEB 1963 BANGALORE

SECRETARY TO GOVERNMENT No PWS 122 7 FEB 1963 PUBLIC WORKS & ELEC. D...

50)

8/2/63

51) Submitted for perusal and orders whether the Secretary, Legislature need be requested to intimate whether the Member has renewed the Question.

"A" is not necessary. The M.L.A. files the same question and if it is received for reply, then

Serial No.

it will be put up with this file.

For orders.

12/2/63

Yes; 'C' record the file for the present

14/4/63

Copy of letter No.MSIP/24/62 dated 12th September 1962 from Minister of State, Ministr of Irrigation and Power to the Chief Minister, Government of Mysore.

I enclose for your information a copy of the Summary of Recommendations of the Krishna-Godavari Commission. Printed copies of the Report will be sent shortly.

Orders of the C.M.

Thank him.

Let the report summary be examined immediately and immediate reactions expressed. Consult Special Officer Sri Balekundry and Jt.Secretary Shri

REPORT OF THE KRISHNA GODAVARI COMMISSION

CHAPTER XVIII

SUMMARY AND RECOMMENDATIONS*

General

18-1 The Krishna and Godavari basins (see Plates I and II) extend over an area larger than France. They cover about 221,000 square miles, more than one-sixth of the entire area of India. They include almost one-fourth (23 per cent) of the culturable area of the Country.

Approximately, 72 per cent of the area of the State of Maharashtra, 61 per cent of Mysore 43 per cent of Andhra Pradesh, 15 per cent of Madhya Pradesh and 11 per cent of Orissa lie in the two basins.

18-2 The Krishna river system has a drainage area of about 100,000 square miles. Together with its tributaries, it drains about 440 miles length of the Western Ghats - the chief source of the Krishna waters. The main river is about 870 miles long. Two of its tributaries, the Bhima, over 500 miles long, and the Tungabhadra, over 300 miles long, are major rivers in their own rights.

About 44,000 square miles of the drainage basin lies in Mysore, 29,000 square miles in Andhra Pradesh and 27,000 square miles in Maharashtra.

18-3 The Godavari river system has a drainage area of about 121,000 square miles. Its principal

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* This Chapter is not intended to replace Chapters I to XVII; only the more important aspects have been summarised here.

source of supply, in its upper reach, is the relatively small catchment in the Western Ghats and, in its lower reach, the forest covered hills and table-lands in the north-east of the basin. The main river is about 910 miles long. The Manjra and the Pranhita, each nearly 450 miles long, the Indravati, over 350 miles long, and the Sabari, about 260 miles long, are four principal tributaries of the Godavari, each a major river in its own right.

Approximately, 59,000 square miles of the drainage basin lies in Maharashtra, 28,000 square miles in Andhra Pradesh, 25,000 square miles in Madhya Pradesh, 7,000 square miles in Orissa and 2,000 square miles in Mysore.

18-4 For detailed studies, each of the large river systems has been divided into 12 sub-basins each (see Plate II and paragraphs 3-22 and 4-27).

18-5 The political distribution of the drainage basins, as described above, came into effect only from 1st November, 1956 (see paragraphs 2-6 to 2-10).

The portion of the two basins, now in Andhra Pradesh was, prior to Independence, under the control of the former Madras Presidency, the erstwhile Hyderabad State, a former princely State and a number of jagirdars: that in Madhya Pradesh was under the former Central Provinces and the erstwhile Bastar State. The areas now in Maharashtra formed parts of the former Bombay Presidency, the former Central Provinces, the erstwhile Hyderabad State and a number of now defunct princely States. Likewise, the part of the two basins now in Mysore was then distributed between the former Madras Presidency, the erstwhile Hyderabad State, the former

Bombay Presidency, the former Mysore State and some defunct princely States. The areas in Orissa were largely in the erstwhile Kalahandi State and in the now defunct Jeypore estate.

18-6 A serious difficulty which the Commission had to encounter, at all stages of its work, arose out of the fact that general statistics, collected with the district as a unit, could not be applied directly to hydrologic units, river basins and sub-basins. The Commission had in such cases to work out appropriate figures based on the proportion which the area of a district within the basin bears to the total area of the district. Apart from this, the Commission found an almost complete absence of published statistics relating to the Krishna and Godavari basins. Most of the important data and information relating to water resources development in the two basins were either non-existant or had not been compiled and analysed before. The Commission thus found that one of its important tasks was to get together and compile whatever data it could obtain.

Except, where specifically indicated, the report of the Commission is based on the technical data and other information supplied by the State Governments concerned. The Commission has not carried out any physical verification of these data nor was this considered necessary. The responsibility for

.....4

the accuracy of those data rests with the State Governments.

18-7 Geologically, (see Plate III) the two basins consist largely of Archaean formations, parts of which are covered over by Deccan trap lavas, Cuddapah and Vindhyan basins and faulted blocks of the Gondwanas.

While the mountains are mere outstanding portions of the old plateau that have escaped the weathering of ages, the rivers have flat shallow valleys with relatively low gradients, the channels having approached the base level of erosion.

Apart from the slopes of the Western Ghats, the irregular ranges of the Eastern Ghats and the table lands in the north-east of the Godavari basin, the entire drainage basin of the two rivers comprises undulating country, a series of ridges and valleys interspersed with low hill ranges.

18-8 The soils are, in general, relatively shallow specially where they are formed in situ. Deep soils are found mainly along the banks of streams and rivers where they have been formed by eroded material brought by and deposited during floods. The typical soil fontures in the two basins and the occurence, texture and properties of the top soil as well as of the sub-grade have been described in Chapter VI (also see Plate VI).

18-9 The total population of the two basins is about 60 million people; about 80 per cent live in rural areas.

18-10 The gross area of the two basins (see paragraph 7-3 and Tables XII and XIII), as per village papers, is about 141 million acres. Of this, about 29 million acres are forests, largely undeveloped. About 99 million acres are culturable, out of which 73 million acres are under cultivation. The area cropped annually is about 76 million acres. The irrigated area is about 7.7 million acres, the irrigated cropped area is about 9 million acres. The latter includes about 1.9 million acres irrigated from the two rivers outside their drainage basins.

18-11 Of the irrigated area of about 7.7 million acres, about 1.9 million acres are irrigated by wells and other sources, about 2.5 million acres by tanks and 3.3 million acres by canals.

18-12 The major crops grown in the two basins, in descending order of the acreage covered, are Jowar (23 million acres), paddy (9 million acres), cotton (7 million acres, ground-nut (6 million acres), Bajra (5 million acres), wheat (3 million acres) and sugarcane and perennials (1 million acres).

Under irrigated conditions, paddy is the principal crop (6 million acres).

18-13 The total installed capacity of hydro-electric generating plants in the two basins, as in March 1961, is about 500,000 kw., that of thermal plants about 100,000 kW. The basins are rich in minerals but the level of exploitation is relatively modest.

18-14 The enormous forest wealth in the Krishna and Godavari basins has largely remained neglected; the level of exploitation is low. The

development of power has so far been poor and the present industrial development is only a modest indication of the large potential which remains to be developed. Under these conditions (see Chapter VIII), the economy of the two basins and adjoining areas depends largely on agriculture, which provides a low level of subsistence except in a small part, where facilities for irrigation have been provided. The well-being and prosperity of the entire Krishna-Godavari region is closely related to the development of water resources of the two river basins.

18-15 Some parts of the Krishna and Godavari basins suffer from frequent failure of rainfall during critical periods in the agricultural rotation. Scarcity conditions then prevail, land revenue is suspended and other relief measures are taken. A study of these areas has been made, taluk-wise, in paragraphs 8-15 to 8-25.

The Commission has found that there are 34 talukas in which 75 per cent or more of the annual land revenue was suspended at least twice in a 10 years period or 50 to 75 per cent of the annual land revenue was suspended at least thrice in a 10-years period. The normal annual yield of crops in those talukas is also low.

18-16 The Commission suggests that the possibilities be examined of collecting general statistics, particularly data of land utilisation, by river basins and sub-basins.

Rainfall.

18-17 The source of all water in the Krishna and Godavari basins, whether in stream flow or in the form of ground waters, is the rain which falls within each basin. There is no evidence of any sub-soil flow getting into the basin from outside or of any subsoil flow escaping from either of the two basins.

18-18 There are 374 rain-gauge stations in the Krishna and Godavari basins for most of which rainfall data over a period of 50 years are available. An examination of the distribution of these raingauge stations, sub-basin-wise (see Plates XI to XXXIV), shows that there are large tracts with no rain-gauge station at all.

18-19 It is necessary to review the number and distribution of rain-gauge stations in the two basins and to establish new stations to fill in such gaps as exist. It is also important that the daily rainfall data for all these stations should be published on a monthly basis by sub-basins. Machinery should be established for a regular study and analysis of these data.

18-20 The Krishna and Godavari basins receive most of their rainfall during the south-west monsoon, from June to September. The high rainfall zone along the Western Ghats (see Plate IV) from forms the western boundary of the two basins for more than 500 miles. The other high rainfall area is the forest covered hills and table-lands in the north-east of the Godavari basin. For the rest, the two basins constitute low rainfall zones. There is a large belt, about 45,000 square miles in area, a short distance east of the Eastern Ghats, varying in width from about 160 miles in the south of the Krishna basin to about 60 miles in the north of the Godavari basin, where the normal annual rainfall is less than 600 mm (about 24 inches).

Maps I to V show in detail the seasonal and annual normal rainfall, incidence and distribution, over the two basins.

18-21 The weighted average annual rainfall of

the Krishna basin is about 31 inches and about three-fourths of it occurs during the four months, June to September (see Table IV).

The weighted average annual rainfall of the Godavari basin is about 45 inches, of which as much as 84 per cent occurs during the four months, June to September (see Table IV).

18-22 Apart from the fact that most of the rainfall is concentrated in the four months, June to September, there is a wide variation in its incidence in time and space. This variation is more marked in the low rainfall zone than in areas of high rainfall and more in the relatively dry part of the year than in the wet months (see Table VI),. The north-east monsoon is much less dependable than the south-west monsoon.

The areas lying towards the south-east of the Krishna basin receive a large proportion of ~~their~~ their annual rainfall during the north-east monsoon. They do not get any dependable rainfall from either the south-west or the north-east monsoon.

Evaporation

18-23 Little observed data is available regarding evaporation but, from the prevailing meteorological features, it is known that both the basins are areas of very high evaporation (see Plate V). During the three months preceding the rainy season, March to May, evaporation rates are very high and the potential evaporation for this period is almost half of the total annual potential evaporation.

18-24 It is necessary to establish an extensive net work of evaporation measuring stations, throughout the two basins, particularly at the sites of existing and proposed reservoirs.

18-25 No information is available about evapo-transpiration in this region. Since this is the most important element in the water requirements of crops, the lack of this data is a serious lacuna in the data required for the optimum development of the water resources of the two basins.

18-26 Systematic observation of evapo-transpiration under various crops needs to be carried out in selected stations throughout the two basins.

River flow

18-27 In general, the rivers rise in the later half of June. July and August are the months of maximum discharge; the volume of flow in these two months varies from 55 to 85 per cent of the annual flow.

The volume of flow during the six months, June to November, is 95 to 97 per cent of the annual flow; after January the rivers are practically dry.

18-28 There has so far been no planned and systematic observation of discharges on either the Krishna or the Godavari river systems and the position with regard to sediment data is worse. In general, the only systematic records that are available pertain to existing anicuts or reservoirs where river flow is calculated on the basis of gauge readings observed from different parts of the works.

18-29 Since the reliability of river discharge data is closely related to the methods of observation and or estimation of discharge, the Commission made special efforts to ascertain these methods. The information obtained has been set out fully in the relevant Annexures along with the data.

At some of the sites for which data are available, the method of observation indicates that these data cannot be relied upon for any purpose. At other sites, the data can be taken as approximately correct, within 20 per cent, plus or minus, of the actual (see Chapter IX).

18-30 Of the 62 sites on the Krishna river system for which some data have been supplied, useful data are available for a period of 10 years or more for only 15 sites and for a period of 20 years or more for only 5 sites (see paragraph 9-3).

On the Godavari river system, out of 44 sites for which data have been made available, useful data for a period of 10 years or more are available for only 16 sites and for a period of 20 years or more for only 7 sites (see paragraph 9-4).

It is surprising to note that the observations being made at some of these sites were discontinued only during 1959 and 1960.

18-31 Because of the un-even distribution of the discharge sites (see Plate VIII), there are many sub-basins in which no river flow data exist (see paragraph 9-25). On a large river system like the Krishna or the Godavari, transit losses, regeneration and timing are important considerations from the point of view of developments on the river. It is, however, not possible to study these features on the two river systems unless a coprehensive system of discharge observations is established and data for a fairly long period collected.

18-32 As an result of new irrigation developments, some additional regeneration is bound to appear in the rivers. The exact quantity cannot be stated at this stage (see para-

graphs 14-28 to 14-31). In addition, there will be some salvage of the transit losses, which now occur. No quantitative values can, however, be assigned at this stage.

18-33 As regards the measure of dependability to be adopted, reference may be made to paragraph 14-35. If the proposals made therein are adopted, the average annual use would not be far from the average river flow.

18-34 The Commission strongly recommends, as a matter of first urgency, the establishment on a permanent basis and on scientific lines, of daily discharge observations at 38 sites on the Krishna River System and 38 Sites on the Godavari River System (see Tables XXI and XXII and Plate IX). The river flow data to be obtained at these sites are essential for the preparation of individual projects, for the preparation of an integrated basin-wide plan, for the subsequent operation of such a plan and the regulation, to best advantage, of the available river waters in any year (see paragraphs 9-39 to 9-45).

18-35 As a number of dams are being constructed in these river basins, it is necessary that, besides taking discharge observations, systematic data should also be collected with regard to the sediment carried by river waters. These data would be of considerable use in working out dead storage, life of reservoirs etc.

18-36 The Commission regard the collection of river discharge and sediment data as a fundamental work of national stock - taking and recommends that, like meteorological data and general surveys, the Central Government should assume the responsibility for this important work and set up a special organization for this purpose under the Ministry of Irrigation and Power (See paragraphs 9-50 to 9-56).

18-37 It is unfortunate that no attempt has so far been made to undertake regular discharge observations at the sites of proposed projects. Even for the projects under construction, little attention has been paid to the observation and compilation of accurate flow data.

For project planning, river flow is estimated by various empirical formulae (see paragraph 8-31). The Commission is unable to support this procedure and consider this practice unsound.

Considerable caution is called for in undertaking any new project on this basis.

18-38 It needs to be stated that for most projects it is not enough to know the average annual yield at the point of diversion; its distribution during the year and its variation, from year to year, are equally important.

Because of this it is necessary to formulate detailed rules for each project laying down the manner in which river flow will be withdrawn, or abstracted for storage, during any 10-day period, under varying conditions of river supply. The operation of all projects in different States will have to be carried on in a co-ordinated manner (see paragraph 13-40 and 18-41)

18-39 The Commission regards it indispensable that, in addition to the work outlined in paragraphs 18-34 to 18-36, arrangements should be made by each State Government

a) to make accurate measurements of the daily withdrawals by all major irrigation canals and power channels and an estimate, from

gauge discharge curves of the withdrawals by other canals and power channels; such gauge discharge curves to be regularly checked and kept up-to-date;

(b) to measure river flow and prepare "water accounts" at the sites of all storage projects and diversion weirs in operation; and

(c) as soon as a new project is conceived, to set up, as a first priority, regular discharge and sediment observations at that site.

It will be necessary to establish a close c ordination between the above work to be done by the State Governments and the work to be done by the Cen Organisation proposed in paragraph 18-36.

Ground waters

18-40 No systematic ground water surveys of the Krishna and Godavari basins appear to have been carried out so far. No data and statistics in this respect are, therefore, available. There are, however, 335,000 wells in the Krishna basin irrigating about 1.13 million acres and 303,000 wells in the Godavari basin irrigating about0.73 million acres. There are indications (see Plate VII) of good ground water characteristics in the sub-soil in the coastal belt and along the lower Godavari valley and the lower Pranhita. Another important source of groun waters would be the seepage from canals and from irrigated fields (see paragraphs 11-26 to 11-28).

18-41 There is a water balance between the rainfall on the one hand and stream flow, ground waters, evaporation and transpiration by crops and native vegetation on the other. Also, accretions to ground water from rainfall, from seepage from irrigation channels and from irrigated fields, unless withdrawn through wells or by pumps will, under good sub-surface surface drainage conditions, seep into the rivers; under the other conditions, these waters will fill pockets, form perched water-tables and may cause local water-logging.

18-42 It is important that regular observations should be made by All State Governments of the position of the ground waters and their fluctuations during the year. The methods to be adopted would vary in different parts according to local conditions. This information is necessary to maintain a close watch on the behaviour of ground waters, particularly in view of the large scale new developments undertaken and contemplated, and for the due exploitation of ground waters, separately or in conjunction with canals.

Developments upto 1951

18-43 Tables XXVI and XXVII show the nature and extent of irrigation developments in the Krishna and Godavari basins respectively. It will be seen that there were only three major schemes and 17 medium schemes in the Krishna basin and five major schemes and 20 medium schemes in the Godavari basin in operation in 1951. There were, in addition, a large number of minor schemes and numerous tanks and small diversions in each basin.

Important particulars, to the extent available, of each major and medium schemes are given in Annexures VIII and XII. These Annexures also show the available particulars of each minor schemes and district-wise figures for small tanks and diversions. Also see Map VI.

18-44 The withdrawals by major and medium schemes, as supplied by the State Governments, are shown in Annexures IV and VII. No information is available regarding the amount of water diverted by can small tanks and diversions. The Commission has, therefore, made rough estimates of the diversions by those small works.

18-45 The State-wise developments of irrigation in the two basins, in 1951, was as follows:-

State	Average annual Irrigation			Average annual diversio		
	Major and medium schemes	Minor Schemes, tanks, etc.	Total	Major & Medium schemes	Minor Schemes, tanks, etc.	Total.
	----Million acres----			------T.M.C.------		
Krishna River System						
Andhra Pradesh	1.23	0.35	1.61	231.1	69.0	290.1
Maharashtra	0.20	0.62	0.22	41.9	1.1	43.0
Mysore	0.06	0.41	0.47	11.3	67.0	78.3
Total	1.52	0.78	2.30	284.3	127.1	411.4
Godavari River System						
Andhra Pradesh	1.39	0.52	1.91	305.3	86.6	392.9
Madhya Pradesh	0.08	0.12	0.20	7.9	12.3	20.2
Maharashtra	0.19	0.42	0.61	32.7	23.3	56.0
Mysore	-	-	-	-	0.2	0.2
Orissa	-	0.02	0.02	-	1.4	1.4
Total	1.66	1.08	2.74	346.9	123.7	470.6
Grand Total Krishna and Godavari Systems	3.18	1.86	5.04	631.2	250.8	882.0

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18-46 Three hydro-electric Projects in Maharashtra, owned by private companies and having an installed capacity of 274,000 kw., used 38.02 T.M.C. of water which was diverted into the Arabian Sea. On the Godavari, there was no hydro-electric power development.

18-47 Evaporation losses from reservoir (see paragraphs 12-24 to 12-26) taken a substantial toll from the available river supplies in the Krishna and Godavari basins. In comparison with the diversions for irrigation, these losses are comparatively very high where the tanks are shallow as generally happens to be the case.

For the major and medium schemes in operation in 1951, the estimated reservoir losses were 12.3. T.M.C. on the Krishna and 12.8 T.M.C. on the Godavari. For minor schemes, these losses have been estimated as 105 T.M.C. on the Krishna and 145 T.M.C. on the Godavari; these are more than the waters applied to irrigation by these schemes.

18-48 The position regarding statistics for tanks is far from satisfactory. There are nearly 60,000 tanks in the two basins irrigating approximately 1.66 million acres and the estimated diversions by them are of the order of 220 T.M.C. Unless systematic long term data regarding these tanks are collected, their effect on river flow cannot be determined.

The Commission recommends that important data for individual tanks should be collected and an up-to-date record maintained. The area irrigated annually by each tank should be measured and recorded, together with an estimate of the quantity of water applied to irrigation.

A survey of each rank should be carried out, periodically, say, every five years, to watch the loss in capacity, if any.

18-49 A number of drains had been constructed in the two deltas as well as on some of the major projects in Maharashtra (see paragraphs 12-27 to 12-34).

No discharge data are, however, available for these drains.

The Commission recommends that discharges of drains should be observed regularly and the data compiled.

Working statistics of canals and distributaries

18-50 There is no system of maintaining operation statistics of canals and distributaries as a permanent record. These statistics are absolutely necessary for watching their performance and efficiency.

The Commission is of the view that complete working statistics of canals and distributaries should be compiled annually and printed in a suitable form so as to be available as a permanent record for future reference.

Developments since 1951

18-51 Developments since 1951 fall into two projects and Schemes which have come into operation before March 1961, eventhough partially, have been described in Annexures IX and XIII and an abstract is given in Tables XXVIII and XXIX. In addition, there have been some improvements on pre-1951 projects; these have been mentioned in paragraphs 13-5 and 13-9. Projects and Schemes, under construction, have been described in Annexures X and XIV and an abstract has been given in Tables XXX and XXXI. Also see Map VI.

18-52 The overall, State-wise, position[1] of

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[1] see paragraph 14-16 and foot note thereto.

the developments undertaken since 1951, as compared with the developments up to 1951, is as follows:

State	Average annual irrigation			Power installed			Average annual diversion		
	Upto 1951	Since 1951°	Total	Upto 1951	Since 1951	Total	Upto 1951	Since 1951	Total
	---Million acres---			---Megawatts---			----T.M.C.----		
KRISHNA RIVER SYSTEM									
Andhra Pradesh	1.61	2.74	4.35	-	90	90	290.1	603.6	703.6
Maharashtra	0.22	0.42	0.64	274	585	859	81.0	129.9	210.9
Mysore	0.47	1.40	1.87	-	33	33	28.3	120.4	148.7
Total	2.30	4.56	6.86	274	708	982	44.9	753.8	1,003.2
GODAVARI RIVER SYSTEM									
Andhra Pradhesh	1.91	0.35	2.26	-	250	250	392.8	27.6	420.3
Madhya Pradesh	0.20	0.09	0.29	-	-	-	20.2	4.9	25.1
Maharashtra	0.61	0.68	1.29	-	15	15	56.0	87.5	143.5
Mysore	-	-	-	-	-	-	0.2	-	0.2
Orissa	0.02	0.08	0.10	-	-	-	1.4	7.8	9.2
Total	2.74	1.20	3.94	-	265	265	470.6	127.7	598.3
Grand total Krishna and Godavari.	5.04	5.74	10.80	274	973	1,247	515.5	881.5	1,601.5

18-53 It would appear from the above that the works undertaken since 1951 will create an irrigation potential much more than had been built upto 1951, during the previous 100 years or more. On the Krishna, the annual irrigation from projects and schemes undertaken since 1951 would be twice the area irrigated as in 1951; on the Godavari these works will increase the irrigated acreage by about 44 per cent.

° Includes improvements effected upto 1961 on pre-1951 projects

§ Includes Mysore's share of irrigation in Tungabhadra High Level Canal - Stage I.

§§ Includes Mysore's share of power in Tungabhadra Project and Tungabhadra Hydro-Electric Scheme - Stage II

○ Includes Mysore's share of annual diversion in Tungabhadra, Rajolibanda and Tungabhadra High Level Canal - Stage I.

The hydro-electric potential to be developed by these projects, though more than in 1951, is still relatively small, particularly on the Godavari.

18-54 It will, however, take many years more* before the potential being created by the developments undertaken since 1951 will be fully developed (see paragraphs 13-60 and 13-61). Against a total annual irrigation of 6.43 million acres to be developed by these works, the area actually irrigated in 1961 was only 0.71 million acres or about 13 per cent. Considerable work has yet to be done and a vast expenditure to be incurred first on the construction of the engineering works and then on the development of the land.

In the view of the Commission, construction work is not proceeding at the optimum rate and relatively little effort is being made for speeding up development. Meanwhile interest charges on the expenditure already incurred keep on accumulating and adding to the cost of development.

18-55 The Commission recommends strongly that an immediate review be made of the developments undertaken since 1951, in each State, in order to ascertain how the construction of the engineering works can be expedited to attain the optimum rate of development on each work. Such additional funds (including foreign exchange) and such other personnel, as may be required, should be allocated to these projects in preference to any new projects. New projects should be sanctioned only if men, material and money are available surplus to the requirements of the projects already undertaken.**

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* For instance, (i) Rajolibanda Diversion Scheme costing Rs.4.5 crores was taken up in 1944, and came into partial operation 14 years late in 1958. Irrigation developed upto 1961 was only 21 per cent; (ii) Bhadra Reservoir Scheme costing nearly Rs.36 crores was taken up in 1947 and came into partial operation in 1957. Development upto 1960-61 was only 7 percent; (iii) Gangapur Scheme, costing nearly Rs.5 crores, was taken up in 1948. It came into partial operation in 1957. Development upto 1961 was only 12 %.

** For proposals to increase the speed of development, see paragraphs 18-74 and 18-78 to 18-81.

18-56 The cost of irrigation development in the Krishna and Godavari basins is relatively high, varying from about Rs.500/- to Rs.1,300/- per irrigated acre (see paragraph 13-48). This high cost is attributable in part to the fact that the supplies made available are proposed to be utilised over a relatively small area or canals are proposed to be run with full capacity or near full capacity only for a few months during the year.

It is necessary that the crop pattern on these projects should be reviewed and the irrigation facilities Provided spread over a larger area and to a larger number of cultivators (also see paragraph 18-74).

18-57 From the point of view of river supplies, most projects undertaken since 1951 have been planned and are being executed as independent units without regard to other projects, existing or proposed, in the basin. Accordingly, each such project assumes for itself the highest priority on all waters reaching the project site and there has been no examination of the hydrological consequences of its operation on the works downstream (see paragraphs 13-40 and 13-41).

18-58 The Commission recommends that the effect of each project undertaken since 1951 on the supplies available for projects downstream of it should be examined, the relative priorities on river flow for each project determined and, where necessary and to the extent now possible, the design of each project should be revised to comply with the requirements of integrated operation.

18-59 Not much attention has been paid to the requirements of drainage operations that may be required in the wake of new irrigation developments.

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New projects and adequacy of river supplies therefor

18-60 A large number of new projects and schemes have been put forward by the State Governments, concerned. These fall in two categories: those which have been referred to in III Plan (some are included in III Plan, others are still under consideration) and those not referred to in III Plan. All these have been described in Annexures XI and XV; important particulars are given in Tables XXXII and XXXIII. The overall position, State-wise, is stated in paragraphs 14-8 and 14-12. (I see Map VI.

In all, the Commission has received particulars of 81 proposed major and medium projects on the Krishna and of 156 such projects on the Godavari; minor schemes on the Krishna and 632 minor schemes on the Godavari are contemplated. There are, of course, a number of small tanks and diversions in addition.

18-16 While most of the projects and schemes mentioned above are based on topo-sheet studies only, in some cases with preliminary reconnaissance of the diversion or storage site, they differ widely in their concept and the diversions proposed are not directly comparable.

So far as irrigation projects are concerned, this concept can best be indicated by the large range in the following figures of average* delta or the quantity of water proposed to be diverted per irrigated acre:

	Krishna River System	Godavari River system
	---feet---	
Andhra Pradesh	4.8	5.0
Madhya Pradesh	-	2.2
Madras	2.7*	-
Maharashtra	2.4	2.1
Mysore	3.4	4.0
Orissa	-	3.4

This range is even wider when one examines individual projects of each State.

So far as power projects are concerned, they are, in some cases, situated in the supply line of an irrigation canal, requiring no additional diversion; in other cases, they would deliver into the river below the power house a regulated supply of water from the tail-race. There are, however, 10 power projects of Maharashtra (paragraph 14-22) which would divert to the Arabian Sea 226.5 B.M.C. of water out of the Krishna basin and one power project of Orissa (paragraph 14-23) which will divert 25.1 B.M.C. of water from the Godavari basin.

18-62 The engineering and economic feasibility of most of the projects has yet to be established; detailed field investigations would have to be undertaken for each such project. Prima-facie some of the projects which require the construction of dams, two or three miles long, and large spillways to store only one or two M.M. of water would not seem to be practical propositions. In case of some projects, it is doubtful whether it would be possible for the land to deal with all the water proposed to be put on it.

By and large, the State Governments have put forward these projects on the tacit assumption of unlimited funds being available and assuming for each project the highest priority on the available flow at the site of the project without consideration of the requirements of other projects on the river system.

18-63 A number of projects have been put forward jointly by two State Governments (see paragraphs 14-44 and 14-45). There are other which, although sponsored by only one State Government, would submerge large areas in the territory of another State (see paragraph 14-46). There is still another class of projects put forward by different States, which impinge on each other (see paragraphs 14-48 and 14-49). Some of these are dependent on the same supply of water; others on the same storage site and still others, if executed, would drown the tail-race waters of an upper power project.

18-64 The requirements of the new projects and schemes, as put forward by the State Governments, have been examined sub-basin-wise, in paragraphs 15-2 to 15-25 along with a rough estimate of the river supplies likely to be available in the sub-basin and the diversions by projects in operation or those undertaken since 1951. The overall result is presented in Table XXXV and the general conclusions in paragraphs 15-36.

18-65 Briefly stated, the supplies available in the Krishna basin and in the upper part of the Godavari basin (sub-basins G 1 to G 5) are inadequate to meet the demands of the projects put forward by the State Governments; the supplies available in the lower

18-68 These diversions, if executed, would call for modifications in some of the projects under execution and in core of those proposed. These modific - tions have been described in paragraph 16-16and the overall effect of the transfer of water in paragraph 16-17.

18-69 In the light of the facts and considerations set out in paragraphs 18-56 to 18-61 and of the relevant portions of Chapters XIV to XVI, the Commission recommends as follows:

(a) Immediate steps be taken to prepare an integrated plan incorporating the power and irrigation developments proposed by different States in the lower Godavari area (see paragraph 15-57) Polavaram-Vijayawada Link and the Godavari-Pulichintala link (see paragraphs 16-6 to 16-13). It should be possible, on the basis of the information contained in this report, field reconnaissance and some preliminary surveys to be carried out, to prepare a preliminary project report in about six months and establish the feasibility, or otherwise, and scope of the proposed diversions from the Godavari to the Krishna.

As soon as this preliminary project report has been prepared, final decision can be taken in accordance with it, in regard to

(i) the scope of the Nagarjunasagar Project (see paragraph 16-16(c);

(ii) sanction to or abandonment of the Nagarjunasagar Hydro-electric Project (see paragraph 16-16(b); and

(iii) the scope of the Srisailam Project (see paragraph 16-16(d)).

It is clear that the Srisailam project would fit in any scheme and, from this point of view, there should be no objection to starting work on the Srisailam Project, the only hydro-electric development left in the lower Krishna area. The scope of the project would, however, have to be reviewed as soon as the preliminary plan mentioned above has been prepared.

In view of the regulated supplies that would be available to the projects, existing and proposed, on the Krishna below Nagarjunasagar, from the Godaveri diversions, and to the canals at Nagarjunasagar, from Srisailam, the crop pattern now proposed on the basis of 4 to 6 month's supply should be revised to take advantage of the regulated flow.

A preliminary survey be made of the proposed Pengonga-Pochampad Link (see paragraph 16-15) and this survey be taken into account before according sanction to the Pengonga Hydro-electric Project (see paragraph 16-16(e)).

18-70 There are wide variations in the scope and the provisions of existing legislation on irrigation development, applicable to different States and different regions of each State in the Krishna and Godavari basins. Apart from the lack of uniformity, there are serious lacunae in some of the Irrigation Acts, both with regard to the powers necessary for Government for the optimum utilization, in the public interest, of the available water resources as well as in the obligations of the cultivators, with regard to construction and maintenance of water-courses (see paragraphs 17-3 to 17-8). An important provision, which does not appear adequately in any existing legislation, is with regard to the obligation of the irrigator to prepare his lands for receiving irrigation waters. As stated in paragraphs 7-23 to 7-24, such a provision is important for the Krishna and Godavari basins.

18-71 There is a multiplicity of departments under the States' Governments dealing with irrigation development. The Public Works Department, the Revenue Department, the Agricultural Department, Village Panchayats, etc. (see paragraphs 17-9 to 17-15 all have some role to play. This division of responsibility ignores the hydrologic unity of river basin and the need of close coordination between inter-dependent developments by works of different classes.

The Public Works Department, required to construct and operate all major and medium works, do not in some States have any real contact with the irrigators. Development is slow and the overall water use not efficient.

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* Even at the Centre, the major and medium projects are dealt in the Ministry of Irrigation and Power and minor projects in the Ministry of Agriculture.

18-72 Because of the history and nature of development of irrigation in the Krishna and Godavari basins and the relatively large quantities of water so far available when compared with the uses developed, there has not been any urge in the past towards an economic use of river supplies (see paragraphs 17-33 to 17-37). The control exercised by Government in sanctioning the use of water and in regulating crop pattern themselves stand in the way of economy in water use. Irrigation practices are such as consume a large quantity of water (see paragraphs 17-42 to 17-44).

The system of 'localisation' introduced in some States is inequitable in as much as it deprives some eligible cultivators from the right to benefit from irrigation facilities while enabling others to use relatively large quantities (see Annexure XVI).

Water-rates vary enormously and are, in most States, un-related both the present-day costs of construction and maintenance of irrigation works and to the present-day benefits derived by the cultivators from the use of irrigation waters. These rates are in strange contrast to the keenness and the enthusiasm with which more and more irrigation works are in demand in the two basins.

Need for a new policy.

18-73 In the entire Krishna basin and the upper part of the Godavari valley, water is a scarce natural resources. Water is also scarce in the adjoining areas lying towards the south-east of the Krishna basin. At the same time, irrigation waters are an expensive commodity. Because of the hydrologic features of the two rivers, almost every projects has to be based on storage. Because

of the terrain, canal construction is more expensive than in the Indo-Gangetic plains or the coastal belts.

Evaporation losses from storage reservoirs and tanks are usually high in the two basins, particularly during the three months preceding the south-west monsoon. The problem is very serious on small shallow tanks, where the water lost by evaporation may equal or exceed that applied to crops.

Most of the land in the two basins is either cropped or bears forests and natural vegetation. The benefits from an irrigation project would, therefore, be the difference between the value of crops sown after irrigation supplies are made available and the value of forests or crops under un-irrigated conditions. Correspondingly, consumptive use on account of irrigation would be the difference between the evapo-transpiration from the crop respectively under irrigated and un-irrigated conditions.

Because of the rolling terrain and spasmodic rainfall of high intensity, soil conservation and proper land utilisation must be regarded as important activities in the two basins, having a significant effect also on their water supplies.

Land treatment is an essential pre-requisite to the introduction of irrigation in most parts of the two basins.

The structure and nature of the soil varies widely in different parts of the two basins and within each river valley. A change-over from un-irrigated to irrigated conditions, therefore, requires expert supervision.

Hydrologically, river flow and ground waters are both parts of a common source of supply and

the developments from surface waters and ground waters.

Minor schemes and small tanks may not be as spectacular as major and medium projects but they are as much an engineering problem as major and medium projects. Under present conditions, they are extravagant in water use and virtually not maintained until they fall into dis-use. With the development of new major works, they will create serious drainage problems. Minor schemes and tanks, therefore, now require expert supervision as much as major and medium schemes; and they have to be merged, wherever possible, into new major projects.

The developments undertaken since 1951 and those proposed, exceed by far, in magnitude and overall effect, the developments undertaken ~~by~~ up to 1951. The latter were largely confined to small valleys and the delta areas; the development of the uplands is now being undertaken on an extensive scale for the first time and these will create many new problems.

18-74 In view of the facts and considerations set out above,

The Commission recommends that the State Governments concerned should all agree to tune their policy regarding irrigation and the administration and management of irrigation works to the requirement of optimum development of a scarce and expensive natural resource.

Some of the steps which should be undertaken immediately in furtherance of this objective are as follows:

(a) Limit the irrigation of paddy to the

rainy season, in order to reduce the use of irrigation supplies to the minimum and (i) to areas of high rainfall such as sub-basins 0.8, 0.9, 0.10, 0.11 and 0.12 and the narrow strip along the Western Ghats where the delta for paddy should not be more than about 2.0 feet (ii) to valley-bottoms and low-lying areas where, because of the seepage from upland irrigation, no other crop can be grown and paddy can be grown with advantage or (iii) to the delta lands.

(b) Adopt a crop pattern which would (i) take full advantage of seasonal rainfall and (ii) not require any stored water after February, so that the reservoirs are emptied by that date. This will save the high evaporation loss from March to May.

(c) Develop the use of ground waters to the maximum; investigate the likely sites and develop the use of under-ground reservoirs, artificially charged during the rainy season.

(d) Limit perennial crops to (i) only those areas where the irrigation supplies required between, say, January to May can be obtained from ground waters or from artificially charged under-ground reservoirs or (ii) to those areas where irrigation waters are obtained from the regulated flows below a power project. In such cases, the perennial areas should be in convenient blocks, so that it is not necessary to run any irrigation channel with a capacity factor of less than 0.5 in any months.

(e) In case of multipurpose projects, the crop pattern should be such as would require irrigation supplies more or less uniformly all the year round.

(f) Reorganise the Public Works Department,

where necessary, to enable it to manage all irrigation projects, major, medium, minor or small tanks, and all stages of planning, construction, operation and development including the assessment of water charges. It is necessary that all aspects of the development of water resources for irrigation and of their ultimate use should be under unified control.

(g) While no control need be exercised, at this stage, with regard to development or irrigation from wells, except where such development is an integral part of a canal system, it is necessary to have in the Irrigation Department, officers to advise cultivators with regard to developments from wells and who should maintain a record of well operations. These officers should also maintain records of the operation of private irrigation works and watch the effect, on the hydrology of the basin, of contour bunding and land treatment in non-irrigated areas.

(h) Introduce necessary legislation along a uniform set of principles to facilitate optimum development of the water resources of the two river basins, laying down appropriate powers for Government and the rights and obligations of the cultivators. A more or less uniform basis for charges for irrigation water supplies and betterment levy etc., should be established.

(i) The present system of administrative account of Irrigation projects should be reviewed and revised to take not of the changed conditions, such as the new direct receipts from agricultural commodities or the processing of agricultural produce. An appropriate basis should be established for taking

note of indirect benefits in the administrative accounts.

18-75 If the use of water supplies is regulated in accordance with the recommendations (a) to (e) above and the administrative changes suggested in (f) above are carried out, the Commission is hopeful that with the available water supplies, with the diversion of surplus Godavari waters into the lower part of the Krishna basin, with the saving in evaporation losses from old tanks as well as new reservoirs, with the regeneration which is likely to result and the salvage in transit losses, it would be possible, indue course, to meet the reasonable requirements of most of the areas proposed to be irrigated by all the projects that have been put forward.

18-76 There should be in every Irrigation Department, a soil survey wing, whose duty should be not only to carry out a scientific soil survey of all areas proposed to be supplied with irrigation waters but also, periodically, to carry out soil survey of the areas already under irrigation in order to study the effect of irrigation supplies on the soil characteristics so that the necessary ameliorative measures can be taken and irrigation ensured as a permanent feature of agriculture (see paragraphs 6-36 to 6-38).

Need for co-operative approach.

18-77 It would have been clear from the conclusions reached in various parts of the report and from the recommendations made above that optimum development of the water resources of the two river

systems would not be possible without a co-operative approach by the States concerned. Close co-ordination in the planning and operation of irrigation and hydro-electric projects, as in other related activities in the two basins, is indispensable. Already, a number of problems have arisen because of the exclusive developments undertaken hitherto which, unless attended to immediately, would become serious as soon as these developments become operative.

The Commission recommends that an inter-state body, a River Board or by whatever name called, should be established without any delay, for bringing about a co-operative approach and establishing the necessary co-ordination in the planning and operation of various developments in the two river basins. The integrated operation of all projects, which is indispensable, would not be possible without such a co-ordinating body.

Irrigation Extension Service.

18-78 It has been stated in paragraph 18-73 that the large potential to be created by the projects undertaken since 1961 must be developed not along the lines of earlier developments, undertaken under very different set of conditions, but in full recognition of the changed circumstances. In the Commission's view, the pace of development on works already completed is slow, and in most cases targets have not been achieved, largely due to the fact that the methods being adopted are not adequate to the needs of the situation.

The Commission recommends for serious consideration that, in each State, an Irrigation

Extension service should be introduced as a part of the Irrigation Department.

It is not enough that the Public Works Department should create large irrigation potentials. They must go further and ensure that these potentials are developed, along scientific lines, for maximum national good, keeping in view the requirements of permanent irrigated agriculture.

18-79. The main functions of the proposed Irrigation Extension Service should be

(a) to carry out systematic studies on the economic use of irrigation waters, consistent with maximization of agricultural output; to determine for each region or district the best crop pattern so as to make maximum use of seasonal rainfall; to co-operate with regional research stations of the Agricultural Department in research new varieties of crops best suited to the nature of irrigation supplies available in any area;

(b) to determine the consumptive use of water by major agricultural and garden crops;

(c) to set up a number of demonstration centres and arrange for field demonstrations to show the cultivators how they can use the available irrigation supplies for maximum benefit, proper land treatment required for each field, proper method of irrigating the field, when to apply irrigation water and how much;

(d) in conjuction with the soil wing,

proposed in paragraph 18-76, advise the cultivators on soil problems.

18-80 In the Commission's view, an organisat of the type described above, as a part of the irrigati department, is indispensable in the Krishna and Godav basins, where large scale irrigation is being introdu in the uplands for the first time, water is scarce an an evolve, but irrigation use to date has been consid extravagant. The change-over from un-irrigated to irrigated agriculture in large areas requires expert guidance and supervision.

18-81 The proposed Irrigation Extension Serv would supplement the present activities of the Agricu tural Department. While the Agricultural Department c concentrate on improvements in un-irrigated area, research on new varieties of crops, both irrigated an un-irrigated, seed multiplication, etc., the Irrig t Extension Service would show the irrigators how irri- gation waters can be used economically to maximum advantage, how land must be prepared for irrigation, the importance of water courses and explain to them the inter-rel tion between irrigation and soil.

pendix F. G.—1]

BJECT K-G. Commission's Report - Summary and Recommendations

ary No. of letter replied to .....

Section

File No.

Serial No.

Mysore Government Secretariat.

( )

the 195 .

D.O No. Irg

To

te of issue.....

Dear Sir,

ned by.....

I am desired to enc

herewith a copy of the Summ

of Recommendations of the Krish

Godavary Commission for yo

information and to requ

you kindly to furnish

your comments thereon immed

Yours sincere

List of enclosures .....

Copied by.....

Sri M.A. Subhan Khan B.A., B.E.

C.E.I.P

Nizamabad

Examined by .....

S.G.BALEKUNDRY,
Officer on Special Duty,
Public Works Department.

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated, 26th Septr.1962.

D.O.No.PWD 5350/B.6

Dear Sir,

I am desired to enclose herewith a copy of the summary of recommendations of the Krishna-Godavary Commission for your information and to request you kindly to furnish your comments thereon immediately.

Yours sincerely,

S/c

(S.G.Balekundry)

Shri M.A.Subhan Khan, B.A., B.E.,
Chief Engineer, Irrigation Projects,
Munirabad.

D.O. No.

Dear Sri Alagesan,

Kindly refer to your letter No.MSIP/24/62 dated 12th September 1962. I acknowledge with thanks the receipt of a copy of the Summary of Recommendations of the Krishna Godavary Commission, with a request to send a copy of the main report as soon as it is ready.

Yours sincerely,

(Chief Minister)

29/9/62

Sri O.V. Alagesan,
Minister of State,
Ministry of Irrigati
and Power,
NEW DELHI.

40 VS 3234 43

S. NIJALINGAPPA, B.A., LL.B.
Chief Minister.

"VIDHANA SOUDHA,"
BANGALORE-1,

SECRET

Dated Oct. 1, 1962

Dear Shri Alagesan,

Kindly refer to your letter No. MSIP/24, dated 12th September 1962. I acknowledge w thanks the receipt of a copy of the Summary Recommendations of the Krishna-Godavary Comm sion with a request to send a copy of the ma report as soon as it is ready. Sorry for the delay in acknowledging your letter.

Yours sincerely,

Sd-
(S Nijalingappa)

Shri O V Alagesan,
Minister of State
in the Ministry of Irrigation & Power,
Government of India,
NEW DELHI

B.K. Uppal,
Deputy Secretary

CONFIDENTIAL

D.O.No. DWII-32(12)/62

GOVERNMENT OF INDIA
MINISTRY OF IRRIGATION AND POWER.
New Delhi

New Delhi, October 9, *1962.*

Subject: Krishana-Godavari Commission - Report of.

My dear Shri Fernandes,

SECRETARY TO GOVERNMENT
D.O. No. 615
11 OCT 1962
PUBLIC WORKS & ELEC. DEPT.

So far we have been able to get only a few copies of the printed report of the Krishana Godavari Commission and 2 copies thereof were sent to the Chief Minister of you State in the last week of September, 1962. We shall arrang to send more copies of this report as soon as these are received from the press.

We hope you and your technical experts have had time to go through the report. In this Ministry Shri C.L. Handa of Central Water & Power Commission in collaboration with Shri D.D.Jaini is carrying out the examination of this report. For furnishing any clarifications that you and your experts may seek and for a preliminary mutual discussion, Sarvashri C.L. Handa and D.D.Jaini would like to meet your technical experts and for this purpose they would be visiting Bangalore from 21st to 24th of October, 1962. It is hoped, you will be able to arrange for such a discussion with them on these dates.

MYSORE GOVERNMENT SECRETARIAT
No 5707
11 OCT 1962
P. W. D. (BUILDING SECTION)

With best wishes,

Yours sincerely,

(B.K. Uppal)

Will this not clash with the Hdcp meeting at Jog?

H/W

Shri P.J. Fernandes,
Secretary to the Govt.of Mysore,
Public Works & Electricity Department
Bangalore

It coincides 100% draft reply is attached. Secy

12/10

P. J. Fernandes IAS
Secy. to Govt. of Mysore
P.W. & E. Dept.

4= Vidhana Soudha,
Bangalore : 12/10/62

Sub:- Krishna Godavary Commission Report

My dear Shri Uppal,

We received a copy of the report only 2 days back. & I am afraid we would not have been able to be ready for discussions through the Solomians Report by 21st. Moreover, myself & our technical officers would be away to Sharavathy from 21st to 24th to attend the Hydro-electric Construction Projects Control Board. Therefore I have to request you to please ask M/s Handa & Jaini to come to Bangalore in the 1st week of November.

With regards,

Yours sincerely,

(P.J.F.)

To: Shri B.K. Uppal
Dy. Secy. to GOI,
Ministry of I.&P.
New Delhi

D.O.No.P.A. 15 4

Dear Shri Uppal,

Subject:- Krishna-Godavari Commission - Report of.

Thank you very much for your kind letter of 9th October. We have just received the copies of the Krishna-Godavari Commission's Report, and they are now under our examination. In view of the bulky nature of the report, I think you will agree that its examination would require some time.

2. According to your letter, Sarvashri C.L.I and D.D.Jaini propose to visit Bangalore from 21st to 24th October. I am afraid these dates will not be suitable to us as we are having a meeting of our Sharavathy Board at the dam site at this very time. May I therefore suggest that the visit of Sarvashri Nanda and Jaini be postponed to the first week of November which will be convenient?

With regards,

Yours sincerely,

(P.J. FERNANDES)

Shri B.K.Uppal,
Deputy Secretary,
Ministry of Irrigation and Power,
NEW DELHI.

SD)

B.K. Uppal,
Deputy Secretary

सत्यमेव जयते

New Delhi. October 25, *1962*.

My dear Shri Fernandes,

Please refer to your D.O. letter No. P.A. 154, dated the 12th of October, 1962, regarding supply of the Krishna-Godavari Commission's report. Two copies of this report were sent to your Chief Minister under Shri Sachdev's D.O. letter No. 418-423/IPS/62 dated the 24th of September, 1962. I am now desired to enclose (i) 8 more copies of the Report (without sub-basin maps and the Annexures) and (ii) 8 copies of Map VI of the Krishna & Godavari basins showing existing and proposed projects, for the use of the the State Government.

The report may kindly be treated as "Secret" at this stage.

Kindly acknowledge receipt.

Yours sincerely,

(B.K. Uppal)

Shri P.J. Fernandes,
Secretary to the Govt. of Mysore,
P.W. and Elect. Department,
BANGALORE.

Encl: 1. Report... 8 copies (S.Nos.38 to 45) By separate post
2. Map VI... 8 copies (-do-)

For orders in the following cases may be issued with a copy each :—

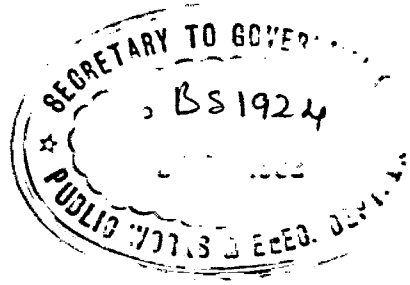
M.P.W.D.

SECRETARY TO GOVERNMENT
DO 663
29 OCT 1962
PUBLIC WORKS & ELEC. DEPTT.

MYSORE GOVERNMENT SECRETARIAT
No. 6012
29 OCT 1962
P. W. D. (BUILDING SECTION)

PWD 60/2/B62

1) Chief Secy. ✓
2) Secy. Pub. & E. ✓
3) J.S. " ✓
4) O.S.D. ✓
5) C.E. (IP) ✓
6) C.E. (G) ✓
7) S.E. (IIL Chawla) ✓



Secy

Also for ✓ and comp. liment with copy of this

M.J. Tummala

Issued
Ends. R.H.S. Rishi Mohan
3.11.92

1) The Minister for PWD. Govt of Mysore
2) The C.S to Govt of Mysore
3) Secretary to Govt. of Mysore, PWD & Dept
4) Jt. Secy to Govt. of Mysore PWD Dept
5) ~~O.S.D. PWD.~~
6) C.E I.P Mandya
7) C.E (Y.P), Mysore, B'lore
8) S.E. I.I.C. Dharwar

I am directed to forward with a copy of the Report of the Krishna Godavary Commission (without the basin maps and the Annexures) for your information. The report may kindly be treated as Secret.

JSJ
PWD
3/11/62

GOVT. OF [illegible].

No.PWD 6012 (2) 62. Mysore Government Secretariat,
Vidhana Soudha, Bangalore - 1.
Dated the 3rd November, 1962.
Kartika 12, Saka Era, 1884.

From

The Secretary to the Government of Mysore,
Public Works Department, Bangalore.

To

1) Minister for PWD
2) C.S. Mysore. 3) Secy Mysore PWD
4) Jt. Secy. PWD 5) C.E. Irr.
6) C.E (Gl). 7) A.E.D. PWD 8) S.E [illegible] Chairman
9) Sri M.S.T. Iyengar.

Sir,

I am directed to forward herewith a copy of the Report of the Air Base Highway Communication (without sub-branch maps and the annexures) for your information. The report may kindly be treated as Secret.

Yours faithfully,

([illegible]),
Officer on Special Duty,
Public Works Department.

Issued
by
[illegible]
3.11.62

47

~~SECRET~~

No.KGC/5258

Office of the Superintending Eng:
Irrigation Investigation Circl
P.B.No.28, Dharwar,

Dated; 7-11-62

6269
13 NOV 1962

To

The Secretary,
Public Works Department,
Government of Mysore, Bangalore.

Ref:- Your No.PWD 6012(B) 62 dated 3-11-196

Sir,

I hereby acknowledge receipt of the Report of th Krishna-Godavari Commission (without sub-basin maps and th Annexures) handed over to me at Bangalore on 5-11-1962. Th report will be treated as secret.

Yours faithfully,

7.11.62

(S.P.BHAT)
Superintending Engineer,I.I.C.

48 - 51

GOVERNMENT OF MYSORE

No 6293(B)62

MYSORE GOVERNMENT SECRETARIAT
VIDHANA SOUDHA,

Dated, Bangalore, 14-11-1962

FROM

The *Secretary to the Government of Mysore,*
Public Works & Electricity Department.

To

Church Road Hutments, New Delhi.

Sir,

Sub: Accommodation.

I am directed to inform you that the following officers will be in Delhi on Government duty on 23rd, 24th, 25th and 26th instant:-

1) Shri M.A.Subhan Khan, Jt.Secretary to the Government of Mysore, Public Works & Electricity Department.

2) Shri S.G.Balekundry, Superintending Engineer and Officer on Special Duty, Public Works Department.

I have to request you to kindly make necessary arrange for their accommodation preferrably at Kotah house and inform action taken to the officer at Sl.No.(2) above.

Yours faithfully,

(S.G.Balekundry),
Officer on Special Duty,
Public Works Department.

Issued
14.11.62

49 52

GOVERNMENT OF MYSORE

No .6346(B)62

MYSORE GOVERNMENT SECRETARIAT,
VIDHANA SOUDHA,

Dated, Bangalore,..16-11-...1962 .

FROM

The *Secretary to the Government of Mysore,*
Public Works & Electricity Department.

To

The Director of Estates,
Church Road Hutments, New Delhi.

Sir,

Sub: Accommodation

In continuation of this office letter No.6293(B)/62 dated 14-11-1962, I am directed to inform you to note that Messrs. M.A.Subhan Khan and S.G.Balekundry will be arriving in Delhi on 24th November 1962 instead of 23rd November 1962. Accommodation may please be reserved accordingly.

Yours faithfully,

16.11.62

(M.A.Subhan Khan),
Jt.Secretary to Government,
Public Works & Elec.Dept.

Issued.
16.11.62

M.A.SUBHAN KHAN,
Jt.Secretary to Government,
Public Works & Elec.Dept.

Mysore Government Secretariat,
Vidhana Soudha,
Bangalore, dated, 16-11- 1962.

D.O.No. PWD 324 SPC 62/6339

ear Shri

Kindly refer to my D.O.letter No.236/JS/62 ated 15-11-1962. From our telephonic conversation n 14-11-1962, I understand that you would be busy n 24th instant. In view of this we have slightly ltered our programme and we would reach Delhi n 24th night and shall meet you on 25th in the ffice for discussions.

I am enclosing herewith a copy of my etter addressed to the Director of Estates and equest you to kindly make your good offices to et the accommodation.

Yours sincerely,

16.11.62

(M.A.Subhan Khan)

ıri C.L.Handa,
ember, (D+R)
entral Water & Power Commission,
ew Delhi.

Expres Telegram

Director of Estates
Church Road Hutments
New Delhi

Reglet 6346 (B) 62 of 16th instant
(stop) Accommodation ~~desired~~
not required.

Workse

OSD
PNJ

Pse copy in confirmation of the
telegram is forwarded to the Director
of Estates, Govt. of India, Church

Express Telegram

DIRECTOR OF ESTATES,
CHURCH ROAD HUTMENTS,
NEW DELHI.

REMYLET 6346 (B) 62 OF 16TH INSTANT
(STOP) ACCOMMODATION NOT REQUIRED

WORKDEC

(Not to be telegraphed)

Sd/-
(S.G.BALEKUNDRY)
Officer on Special Duty,
Public Works Department.

BANGALORE:
DATED:

Memo No.PWD 344 SPG 62, Bangalore, Dated: 22-11-1962.

Post copy in confirmation of the telegram is forwarded to the Director of Estates, Government of India, Church Road, Hutments, New Delhi.

(S.G.BALEKUNDRY)
Officer on Special Duty,
Public Works Department.

Government of India,
Directorate of Estates.

New Delhi, the

From

The Deputy Director of Estates,
New Delhi.

To

Shri S. G. Balekundry,
Officer on special Duty, Public Work
Department, Mysore Govt. secretar
Vidhana Soudha, Bangalore.

Dear Sir/Madam,

With reference to your letter/Memorandum No. 6293(B)
dated the 14.11.62, it is
regretted that due to the commitments for accommodation
already made by this office, it will not be possible to
reserve any accommodation in any of the Government Hostels
for you/Shri M. A. Subhan Khan from 23.11.62.
to 26.11.62.

MYSORE GOVERNMENT SECRETARIAT
No 6507
26 NOV 1962
P. W. D. (BUILDING SECTION)

Yours faithfully,

for Deputy Director of Estates.

'Gupta'
26.10.62.

This is the stock reply that we
every time
are receiving from Dir. of Estates, for ov
two years. This is additional re
as to why we cannot go the

GOVERNMENT OF MYSORE 54 57

No. PWD 346 SPG 62

Mysore Government Secretariat,
'Vidhana Soudha'

Bangalore, Dated: 29 November 62.

From

The Secretary to the Government of Mysore,
Public Works & Electrical Department.

To

The Chief Engineer,
Irrigation Projects,
Bangalore.

Sir,

Sub: Visit of the Chief Engineer, Irrigation Projects, B'lore to Delhi to attend the discussion on the report of the Krishna-Godavari Commission at Delhi.

- - - - -

I am directed to state that the Governor of Mysore is pleased to permit you to proceed to Delhi to attend the discussions on the report of the Krishna Godavari Commission, at Delhi from 3/12/62 to 7/12/1962.

The Governer is also pleased to permit the Officers noted in the margin, in partial modification of G.O. No.PWD 346 SPG 62 dated 15/11/62, to proceed to Delhi in connection with the technical clearence for Malaprabha Project, during the same period from 3/12/62 to 7/12/62.

1. Sri M.A. Subhan Khan,
   Joint Secretary, Public Works Department
2. Sri I.M. Mugdum,
   Chief Engineer, Irrigation Projects.
3. Sri S.J. Balekundry,
   Officer on Special Duty, P.W.D.

ed in No. PWD
d...

An advance of Rs.650/- (Rupees six hundred and fifty only) is also sanctioned to each of the above said officers, subject to its adjustment in their T.A. bills in due course.

Yours faithfully,

— Sd —

(S. Murighendraswamy)
Under Secretary to Government,
Public Works Deptt. (Services).

Copy to:

1. The Chief Secretary to Government.
2. The Accountant General, Bangalore.
3. The Joint Secretary to Government, Public Works Department.
4. The Officer on Special Duty, Public Works Department.
5. The Private Secretary to Chief Minister.
6. The Private Secretary to Minister for Public Works.
7. The Personal Assistant to Secretary (Public Works & Elecl Dept

for information.

28/4

Under Secretary to Government,
Public Works Deptt. (Services).

for information.

Under Secretary to Government,
Public Works Dept. (Services).

MYSORE LEGISLATIVE COUNCIL
Third Session, 1962
-:ooo:-

PWD

.. Shri M.P. Eswarappa (L.A. Constituency)

Will the Government be pleased to state:

a) whether they have received a copy of the report of the Gulhati Commission appointed by the Govt. of India in respect of the sharing of the Krishna and Godavari waters;

b) if so, the steps taken by the Govt. to get the due share of water for our State;

c) whether they will place the report on the table of the House and what is the gist of the report?

...ARY TO GOVT...
...No 1034 OSD
...NOV 1962
...WORKS & ELEC. DEPT.

6573
28 NOV 1962
D. W. D. (BUILDING SECTION)

ADVANCE COPY

9 DS 62
1/11/62

The K-G. Commission's Report is still secret
Policy re. (c) may also be indicated.

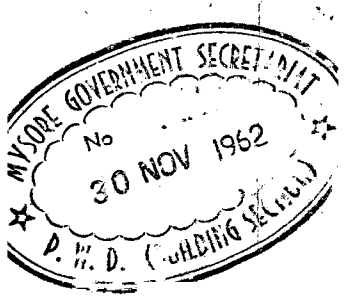
BS2068
...WORKS & ELEC. DEPT.

It is still a confidential document and as such it will not be possible to furnish any details
29.11.62

S. G. BALEKUNDRI
Officer on Special Duty
Public Works Department

√ P. Share
the concerning extra
0/ Govt formalities
the Report. Have
they specifically
asked us to
keep the report
secret ? √

30/10



To

The Chief Secretary to Government of Mysore,
BANGALORE

SIR,

I am directed to forward herewith Legislative Council Starred question (copied below) as admitted by the Chairman.

Yours faithfully,

K. S. Shivaswamy
Secretary,
Mysore Legislature.

Copy forwarded to Sri. M.P. Dorerappa .....Member, Legislative Council, (L.A. Constituency)
for information.

Starred Question No. :— 16.

Will the Government be pleased to state:

a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari Waters;

b) if so, the steps taken by them to get the due share of water for Mysore State;

c) whether they will place the report on the table of the House and what is the gist of the report?

SECRETARY TO GOVERNMENT No. L1 1068 0s9 1962

MYSORE GOVERNMENT SECRETARIAT No. 6650 1 DEC 1962 P. W. D. (BUILDING SECTION)

30 NOV 1962

Pl. put up/1 Secy's demand.

MYSORE LEGISLATIVE COUNCIL
Third Session 1962
---

*Qn.No.16 by Shri M.P.Eswarappa (.L.A. Constituency).

Will the Government be pleased to state:

a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari waters;	.. Yes
b) if so, the steps taken by the Government to get the due share of water for our States;	.. The report is unde consideration
c) whether they will place the report on the table of the House and what is the gist of the report ?	.. no, as the report still confidential

Dy Secretary to Government,
P.W. & Elec.Dept.

SUPPLEMENTARY NOTE TO L.C. *Qn.No.16 -
Third Session 1962.

In view of the failure of the Inter-State Conference of September 1960 to arrive at an agreed allocation of Krishna-Godavari waters, "The Government of India have had under consideration the question of reviewing the position in respect of the availability of supplies in Krishna and Godavari rivers with a view to determining the extent to which further demands on these waters could be made." Accordingly it was decided to set up a Commission for this purpose headed by Sri N.D.Gulhati. The terms of reference were:

(1) to report the availability of supplies in the Krishna and Godavari rivers at various dependabilities,

(2) to report on the requirements of the projects in the two basins as (i) existed prior to 1951, (ii) as sanctioned up to March 1961 as also (iii) as further proposed by the States,

(3) to report on the feasibility of diverting the surplus supplies in the Godavari to the Krishna indicating the quantity to be diverted.

2. The Commission has reported as under on each of the three issues:-

(1) The yields of Krishna and Godavari cannot be stated in precise terms since there are not many reliable gauging stations in the two basins and also the total yields as gauged at Vijayawada and Davaleswaram anicuts are not based on scientific methods. However the Commission indicates that the Krishna yields may be at least 10 percent more than what the Vijayawada gauges indicate. Based on individual gauges and extrapolation with rainfall figures the yields of all the sub-basins of Krishna have been approximately computed by the Commission as 2217 TMCFT.

Similarly the total yields of all the sub-basins of Godavari comes to 4630 TMCFT.

(2) The requirements of old works, works sanctioned up to 1961 and future works in the Krishna basin are as under:-

States	Demand		Demand for future works	Total
	Pre-51 works	Post-51 works to 1961.		
1	2	3	4	5
1.Maharashtra	81	125	560	766
2. Mysore	78	247	762	1087
3. Andhra Pradesh	290	352	1464	2106
Total	449	724	2786	3959

(3) The Commission reports feasibility of diverting Godavari waters as follows:-

(a) Polavaram Vijayawada Link:-

With a canal taking off from Polavaram barrage to come on Godavari linking up with Vijayawada anicut the demand of about 211 TMCFT for Krishna delta could be transferred.

(b) Godavari-Polichintala Link:-

This link canal would take off from Inchampalli Reservoir to come on Godavari, and cross the ridge line between Godavari and Krishna by means of a tunnel whereafter it will fall to the proposed Polichintala Reservoir to come on Krishna (in between Nagarjuna Sagara and Vijayawada anicut). The Commission proposes diversion of about 95 TMCFT through this link.

(c) Thus the total diversion that the Commission envisages is 306 TMCFT.

3. However, from a comparison of the Commission's detailed figures of yields of the lower Godavari and its tributaries with the corresponding demands for irrigation, it is seen there are more than 1000 TMCFT of surplus which would go to waste into the Bay of Bengal if not diverted. Therefore, the maximum possible extent of diversion is 1000 TMCFT which could be utilised by extending the Inchampalli Link Canal up to Madras City along the east-coast.

MYSORE LEGISLATIVE COUNCIL
Third Session 1962.

Starred Question No. 16 by Sri M.P. Eswarappa (L.A. Constituency).

Will the Government be pleased to state:-	Reply by the Chief Minister:-
a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari waters;	a) Yes
b) if so, the steps taken by them to get the due share of water for Mysore State;	b) The report is under consideration.
c) whether they will place the report on the table of the House and what is the gist of the report?	c) No, as the report is still confidential.

(K.B.MURAPPA)
Deputy Secretary to Government,
Public Works Department (Irrigation).

MYSORE LEGISLATIVE COUNCIL
Third Session 1962.
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Starred Question No. 16 by Sri M.P. Eswarappa (L.. Constituency).

Will the Government be pleased to state:-	Reply by the Chief Minister:-
a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Cauvari waters;	a) Yes
b) if so, the steps taken by them to get the due share of water for Mysore State;	b) The report is under consideration.
c) whether they will place the report on the table of the House and what is the gist of the report?	c) No, as the report is still confidential.

(K.B.MUNIRAJAPPA)
Deputy Secretary to Government,
Public Works Department (Irrigation).

MYSORE LEGISLATIVE COUNCIL
Third Session 1962.

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Starred Question No. 16 by Sri M.P. Eswarappa (L.. Constituency).

Will the Government be pleased to state:-

Reply by the Chief Minister:-

a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari waters;

a) Yes

b) if so, the steps taken by them to get the due share of water for Mysore State;

b) The report is under consideration.

c) whether they will place the report on the table of the House and what is the gist of the report?

c) No, as the report is still confidential.

(K.B. HUCHAPPA)
Deputy Secretary to Government,
Public Works Department (Irrigation).

Starred Question No. 16 by Sri M.P. Kaveappa (L. Constituency).

Will the Government be pleased to state:-

Reply by the Chief Minister:-

a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari waters;

a) Yes

b) if so, the steps taken by them to get the due share of water for Tyagaraja Sagar Project;

b) The report is under consideration.

c) whether they will place the report on the table of the House and what is the gist of the report?

c) So, as the report is still confidential.

(K.D. [illegible])
Deputy Secretary to Government,
Public Works Department (Irrigation).

MYSORE LEGISLATIVE COUNCIL
Third session 1962.
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Starred question No. 16 by Sri M.P. Basavarappa (L. . Constituency).

Will the Government be pleased to state:-

Reply by the Chief Minister:-

a) whether they have received a copy of the Report of the Gulhati Commission appointed by the Government of India in respect of the sharing of the Krishna and Godavari waters;

a) Yes

b) if so, the steps taken by them to get the due share of water for Mysore State;

b) The report is under consideration.

c) whether they will place the report on the table of the House and what is the gist of the report?

c) No, as the report is still confidential.

(K.B. [illegible])
Deputy Secretary to Government,
Public Works Department (Irrigation).